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I CLAIM
Patent Claims

1. Scaffold coupling element for tubular scaffold elements (2) featuring two half braces (3, 4) which can be attached around the scaffold element (2) and pivot around a bolt (5). A closing element (6) tightens the braces (3, 4) and connects them with an additional brace (7) or a pair of braces which hold a second scaffold element. The closing element (6) consists of T-head bolts (10) which are held by bell-shaped projecting parts (11) limiting the pivotal motion of the T-heads (12). The shaft (13) with the thread (14) and the nut (15) fit into the fork-shaped, free end piece (16) of the corresponding brace (7) which functions as a closing mechanism (8),

characterized by the fact

that the T-head (12) of the T-head bolts (10) is designed to fit the bell (26) of the projecting parts (11) and by adding contact surfaces (27) to avoid jamming inside the bell (27) or turning during the tightening of the bracing elements (6) while allowing a pivotal motion.

2. Scaffold coupling element according to claim 1,

characterized by the fact

that the T-head (12) is shaped like a wedge and that it fits the bell (26) and also features shaped parts (20, 21, 22; 24) with contact surfaces (27) and that the shaft also features contact surfaces (28) which altogether avoid a turning motion inside the bell (26).

3. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~
characterized by the fact
that the shaped parts (20, 21) are fit to correspond to the
free ends of the T-head (17,18) or to shape those ends.

4. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~
characterized by the fact that the free ends of the T-head
(17, 18) are beveled towards the shaft (13) and form a flat
surface.

5. Scaffold coupling according to claim 4,
characterized by the fact
that the free ends of the T-head (17, 18) feature a short
bevel (38) at the back of the T (23) pointing away from the
shaft (13), then a short vertical bevel (39) and finally a
longitudinal bevel (40) pointing towards the shaft (13).

6. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~
characterized by the fact
the shaft (13) is shaped to feature contact surfaces (24)
where it attaches to the head (29).

7. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~
characterized by the fact
that the shaft (13) in its base (29) features vertical
contact surfaces (28) such as the free ends of the T-heads

(17, 18). The contact surfaces (28) would be located vertically towards the longitudinal extension of the T-head (12) or the shaft (13).

8. Scaffold coupling according to claim 5, **characterized by the fact** that the contact surfaces (28) have limiting edges (42, 43) that are specially formed as bevels (44, 45) to become wider towards the thread (14).

9. Scaffold coupling according to ^{Claim 1} ~~one of the~~ ~~aforementioned claims~~,

characterized by the fact that the contact surfaces (27, 28) at the free ends of the T-head (17, 18) and at the base (29) of the shaft (13) are specially shaped

10. Scaffold coupling according to ^{Claim 1} ~~one of the~~ ~~aforementioned claims~~,

characterized by the fact that the contact surfaces (28) in the base (29) of the shaft (13) reach all the way to the fork-shaped free end piece (16) of the closing mechanism (8) when completely inserted.

11. Scaffold coupling according to ^{Claim 1} ~~one of the~~ ~~aforementioned claims~~,

characterized by the fact that the free end pieces of the T-heads (17, 18) have slightly flattened supporting surfaces (32) on the side facing the bell (26).

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12. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~

characterized by the fact

that the free end pieces of the T-heads (17, 18) on one hand and the bell (26) of the projecting parts (11) on the other hand would be shaped to correspond to each other and preferably feature corresponding contact and supporting surfaces (27, 28, 32, 33).

13. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~

characterized by the fact

that the end pieces of the T-head (17, 18) feature a glide enhancing coating, preferably in the area of the contact and support surfaces (27, 28, 32).

14. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~

characterized by the fact

that the ends of the T-heads (17, 18) or the entire T-head bolts (10) are made from a softer material than the material of the half braces.

15. Scaffold coupling according to ^{claim 1} ~~one of the~~
~~aforementioned claims,~~

characterized by the fact

that there is an indentation (48) on the back of the T-head (23) which is set to correspond with the enclosed scaffold element (2).

16. Scaffold coupling according to claim 7,
characterized by the fact
that an additional contact surface (30) is intended similar
to the contact surface (28) but which expands in a V-shape
in the area of the shaft (13) up to the middle of the T-head
(12).

17. Scaffold coupling according to claim 1,
characterized by the fact
that the bell (26) of the projecting parts (11) in its
lowest point (55) is fit for the T-head (15) and equipped
with contact surfaces (27') to that a turning or jamming of
the T-head bolt (10) during the tightening of the bracing
element (6) can be prevented.

18. Scaffold coupling according to claim 17,
characterized by the fact
that the contact and support surfaces (27', 28', 32') are
shaped to enclose the ends of the T-head (17, 18) and the
arched surfaces (56) in between.

19. Scaffold coupling according to ^{Claim 1} ~~one of the~~
~~aforementioned claims,~~
characterized by the fact
that the bell (26) to feature contact surfaces (27', 28',
32') just shortly prior to the lowest point in the bell (55)
while the corresponding base (58) relates to the thickness
of the T-head (12).